What is claimed is:

1. A fluid analyzer comprising:

a concentrator having a first solid-state thin-film heater-adsorber support channel of solid support;

a phased heater array proximate to the first solid-state thin-film heater-adsorber support channel; and

a separator having a second solid-state thin-film heater-adsorber support channel connected to the first solid-state thin-film heater-adsorber support channel.

2. The analyzer of claim 1, further comprising a controller connected to the concentrator and the separator.

3. The analyzer of claim 2, further comprising at least one detector connected to the controller.

4. The analyzer of claim 3, wherein the first and second solid-state thin-film heater-adsorber support channels are

for concentrating and separating a fluid having a pressure greater than 50 psi (≈ 3.5 bar).

5. The analyzer of claim 4, wherein the first and second solid-state thin-film heater-adsorber support channels are for concentrating and separating a fluid subject to a pressure of up to about 10,000 psi (≈ 700 bar).

6. The analyzer of claim 5, wherein the heater array comprises:

a plurality of heaters in a row along a direction of flow of a fluid to be analyzed; and

each heater of the plurality of heaters may be turned on sequentially at a rate of movement in a direction equivalent to a flow of a fluid to be analyzed.

7. The analyzer of claim 6, wherein the first and second solid-state thin-film heater-adsorber support channels have a substrate of a micro-brick structure comprising at least one material from a group of Si, SiO_2, glass, quartz, sapphire, steel and the like.

8. The analyzer of claim 7, wherein the first and second solid-state thin-film heater-adsorber support channels comprise a sufficiently stable, heat resistant and thermally insulating material.

9. The analyzer of claim 6, wherein the first solid-state thin-film heater-adsorber support channel with segmented heaters is a capillary.

10. The analyzer of claim 9, wherein the capillary has an inside surface coated with an absorber material.

11. The analyzer of claim 10, wherein each heater of the plurality of heaters is formed as a film segment on a capillary wall.

12. The analyzer of claim 11, wherein the capillary comprises a material from a group of glass, quartz, sapphire, steel and the like.

13. The analyzer of claim 9, wherein the second solid-state thin-film heater-adsorber support channel is a capillary.

14. The analyzer of claim 13, further comprising a flow sensor proximate to at least one solid-state thin-film heater-adsorber support channel.

15. The analyzer of claim 14, comprising an electrical conductivity detector proximate to at least one solid-state thin-film heater-adsorber support channel.

16. The analyzer of claim 15, further comprising a hyper concentrator having a third solid-state thin-film heater-adsorber support channel connected to the first solid-state thin-film heater-adsorber support channel.

17. A means for analyzing a fluid, comprising:

means for concentrating a fluid under high pressure with phased heating; and

means for separating a fluid under high pressure; and

wherein high pressure is approximately between 50 psi (~ 3.5 bar) and 10,000 psi (~ 700 bar).

18. The means of claim 17, further comprising:

means for detecting a rate of flow of a fluid; and

means for detecting a thermoconductivity of a fluid.

19. The means of claim 18, further comprising a means for processing rates of flow and thermoconductivities of a fluid.

20. The means of claim 19, wherein the high pressure is approximately between 50 psi (~ 3.5 bar) and 10,000 psi (~ 700 bar).

21. The means of claim 20, wherein:

said means for concentrating a fluid may comprise a first capillary; and

said means for separating may comprise a second capillary.

22. The means of claim 21, further comprising a means for detecting an electrical conductivity of a fluid.

23. A method for analyzing a fluid comprising:

concentrating a fluid under high pressure with phased heating of the fluid;

separating the fluid under high pressure; and

wherein high pressure is greater than 50 psi (~ 3.5 bar).

24. The method of claim 23, further comprising:

detecting a rate of flow of the fluid; and

detecting a thermoconductivity of the fluid.

25. The method of claim 24, processing rates of flow and thermoconductivities to determine properties of the fluid.

26. The method of claim 25, wherein high pressure is greater than 10,000 psi (≈ 700 bar).

27. A fluid analyzer comprising:

a first channel having a plurality of heaters; and

a second channel connected to the first channel; and

wherein:

the first channel has a structure sufficient to withstand an internal high pressure;

the second channel has a structure sufficient to withstand an internal high pressure; and

the internal high pressure is greater than 10,000 psi (≈ 700 bar).

28. The analyzer of claim 27, further comprising:

at least one thermoconductivity detector situated in at least one channel; and

at least one flow sensor situated in at least one channel.

29. The analyzer of claim 28, further comprising a controller connected to the first channel, the second channel, the at least one thermoconductivity detector, and the at least one flow sensor.

30. The analyzer of claim 29, wherein

the first channel comprises at least one interactive element corresponding to each heater element of the plurality of heaters; and

the plurality of heater elements may be energized in a time phased sequence to heat the corresponding at least one interactive element.

31. The analyzer of claim 30, wherein each corresponding interactive element may absorb and desorb constituents of a fluid in the first channel.

32. The analyzer of claim 31, wherein the second channel may separate a fluid by compound.

33. The analyzer of claim 32, wherein the first channel is a first capillary.

34. The analyzer of claim 33, wherein the second channel is a second capillary.

35. A fluid analyzer comprising:

an elongated structure having an inside surface and an outside surface;

an adsorber material formed on the inside surface of the structure; and

a heater material formed on the outside surface.

36. The analyzer of claim 35, wherein the heater material is formed in segments having a non-conducting gap between the segments.

37. The analyzer of claim 36, wherein the heater segments are connected to a phased heater circuit to provide a heat pulse that moves along a length of the structure.

38. The analyzer of claim 35, wherein the heater film is continuous throughout the structure.

39. The analyzer of claim 38, further comprising conductors formed on the heater film, wherein the conductors are connected to a power source circuit.

40. The analyzer of claim 35, wherein the structure is a concentrator.

41. The analyzer of claim 35, wherein the structure is a separator.

42. The analyzer of claim 35, wherein the structure is a capillary.

43. The analyzer of claim 35, wherein the elongated structure is a concentrator and separator.

44. A fluid analyzer comprising:

an elongated structure having an inside surface and an outside surface;

a heater material formed on the inside surface; and

an adsorber material formed on the heater material.

45. The analyzer of claim 44, wherein the heater film is coupled to a microwave source.

46. The analyzer of claim 44, wherein the elongated structure is a tube.

47. The analyzer of claims 46, wherein the tube is a capillary.